

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	4359	(signal speech voice data) near (detect detection recognition recognize) and frame and sample and threshold	USPAT	OR	ON	2003/11/06 10:11
S2	386	(signal speech voice data) near (detect detection recognition recognize) and frame and sample and (threshold same valid)	USPAT	OR	ON	2003/11/04 10:43
S3	167	(signal speech voice data) near (detect detection recognition recognize) and (frame same sample) and (threshold same valid)	USPAT	OR	ON	2003/11/04 11:13
S4	22	(signal speech voice data) near (detect detection recognition recognize) and (frame same sample) and (threshold same valid) and "704"/\$.ccls.	USPAT	OR	ON	2003/11/04 11:01
S5	6	704/233.ccls. and (threshold same (valid validity)) and transform	USPAT	OR	ON	2003/11/04 11:02
S6	129	(signal speech voice data) near (detect detection recognition recognize) and (frame same sample) and (threshold same valid) and program	USPAT	OR	ON	2003/11/06 10:14
S7	0	(compostie near signal) and "704"/\$.ccls. and (((spectrum spectral) near3 energy) same threshold)	USPAT	OR	ON	2003/11/06 10:15
S8	0	(compostie near signal) and (((spectrum spectral) near3 energy) same threshold)	USPAT	OR	ON	2003/11/06 10:15
S9	0	(compostie near3 signal) and (((spectrum spectral) near3 energy) same threshold)	USPAT	OR	ON	2003/11/06 10:15
S10	3542	((accumulator ACC) same frame) (((spectrum spectral) near3 energy) same threshold)	USPAT	OR	ON	2003/11/06 10:16
S11	5	((accumulator ACC) same frame) and (((spectrum spectral) near3 energy) same threshold)	USPAT	OR	ON	2003/11/06 10:18
S12	10	((accumulator ACC) same frame) and (((spectrum spectral) near3 energy) or pitch) same threshold)	USPAT	OR	ON	2003/11/06 10:24
S13	24	((accumulator ACC) same sample) and (((spectrum spectral) near3 energy) or pitch) same threshold)	USPAT	OR	ON	2003/11/06 10:32

S14	24	((accumulator ACC accumulate cumulative adder) near4 (frame sample input data)) and (((spectrum spectral) near3 energy) or pitch) near3 threshold)	USPAT	OR	ON	2003/11/06 11:00
S15	1154	((detect detection) near3 (speech voice audio) same (noise composite))	USPAT	OR	ON	2003/11/06 10:41
S16	434	((detect detection) near3 (speech voice audio) near6 (noise composite))	USPAT	OR	ON	2003/11/06 10:42
S17	4	((detect detection) near3 (speech voice audio) near6 (noise composite)) and (((spectral spectrum) near3 energy) near7 threshold)	USPAT	OR	ON	2003/11/06 10:48
S18	0	VAD and (((spectral spectrum) near3 energy) near7 threshold) and ((validation validate) near6 range)	USPAT	OR	ON	2003/11/06 10:48
S19	0	(((spectral spectrum) near3 energy) near7 threshold) and ((validation validate) near6 range)	USPAT	OR	ON	2003/11/06 10:49
S20	5	VAD and (((spectral spectrum) near3 energy) near7 threshold)	USPAT	OR	ON	2003/11/06 10:49
S21	5598	((fram\$3 bloc\$5 sampl\$3) near4 ((composite total complete) or ((audio voice video telephony computer speech) with (noise error spurious echo ghost interlac\$4 static glitches)))) and ((transform DCT FFT Fourier) with (product coefficient number data "spectral energy"))	USPAT	OR	ON	2003/11/07 14:24
S22	218	((fram\$3 bloc\$5 sampl\$3) near4 ((composite total complete) or ((audio voice video telephony computer speech) with (noise error spurious echo ghost interlac\$4 static glitches)))) and ((transform DCT FFT Fourier) with (product coefficient number data "spectral energy") with threshold)	USPAT	OR	ON	2003/11/07 16:09

S23	18	((fram\$3 bloc\$5 sampl\$3) near4 ((composite total complete) or ((audio voice video telephony computer speech) with (noise error spurious echo ghost interlac\$4 static glitches)))) and ((transform DCT FFT Fourier) with (product coefficient number data "spectral energy")) and echo and (overlap with frame) and (computer application program\$3)	USPAT	OR	ON	2003/11/07 14:50
S24	9	((fram\$3 bloc\$5 sampl\$3) near4 ((composite total complete) or ((audio voice video telephony computer speech) with (noise error spurious echo ghost interlac\$4 static glitches)))) and ((transform DCT FFT Fourier) with (product coefficient number data "spectral energy")) and echo and (overlapping with frame) and (computer program\$3)	USPAT	OR	ON	2003/11/07 15:48
S25	6	((fram\$3 bloc\$5 sampl\$3) near4 ((composite total complete) or ((audio voice video telephony computer speech) with (noise error spurious echo ghost interlac\$4 static glitches)))) and ((transform DCT FFT Fourier) with (product coefficient number data "spectral energy")) and echo and (overlap\$4 with frame) and (computer program\$3) and (echo near3 detect\$5)	USPAT	OR	ON	2003/11/07 15:56
S26	0	("narrow band noise") with (echo near3 detect\$5)	USPAT	OR	ON	2003/11/07 15:56
S27	0	("narrow band noise") same (echo near3 detect\$5)	USPAT	OR	ON	2003/11/07 15:57
S28	40	((fram\$3 bloc\$5 sampl\$3) near4 ((composite total complete) or ((audio voice video telephony computer speech) with (noise error spurious echo ghost interlac\$4 static glitches)))) and ((transform DCT FFT Fourier) with (product coefficient number data "spectral energy")) and (echo with detection)	USPAT	OR	ON	2003/11/07 16:09

S29	25	((fram\$3 bloc\$5 sampl\$3) near4 ((composite total complete) or ((audio voice video telephony computer speech) with (noise error spurious echo ghost interlac\$4 static glitches)))) and ((transform DCT FFT Fourier) with (product coefficient number data "spectral energy")) and (echo with detection) and (computer)	USPAT	OR	ON	2003/11/07 16:12
S30	1	((fram\$3 bloc\$5 sampl\$3) near4 ((composite total complete) or ((audio voice video telephony computer speech) with (noise error spurious echo ghost interlac\$4 static glitches)))) and ((transform DCT FFT Fourier) with (product coefficient number data "spectral energy")) and ((echo near3 detection) same noise)	USPAT	OR	ON	2003/11/07 16:22
S31	16	"echo detection" with noise	USPAT	OR	ON	2003/11/07 16:32
S32	31	"echo detector" and (speech voice audio)	USPAT	OR	ON	2003/11/07 16:33
S33	169	noise with (echo near3 (detect\$4))	USPAT	OR	OFF	2003/11/07 16:45
S34	20	"echo detection" same noise	USPAT	OR	OFF	2003/11/07 16:48
S35	32	(detect\$4 near2 echo) and (noise near2 cancel\$4) and speech	USPAT	OR	OFF	2003/11/07 16:49
S36	19	(echo near3 (detection detect cancel cancellation)) with ("signal to noise ratio" "signal-to-noise ratio" SNR)	USPAT	OR	OFF	2003/11/10 09:35
S37	0	VAD same ((echo near3 (detect detection)) with delay)	USPAT	OR	OFF	2003/11/10 09:35
S38	2	VAD and ((echo near3 (detect detection)) with delay)	USPAT	OR	OFF	2003/11/10 09:36
S39	2	"704"/\$.ccls. and ((echo near3 (detect detection)) with delay)	USPAT	OR	OFF	2003/11/10 09:42
S40	19	(speech voice) and ((echo near3 (detect detection)) with delay)	USPAT	OR	OFF	2003/11/10 09:42
S41	16	((number near4 sample) with threshold) and 704/233.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/08 15:20
S42	94	((number near4 sample) with threshold) and "704"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/08 15:26

S43	22	((number near4 sample) with threshold) and "704"/\$.ccls. and (fourier transform)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/08 15:38
S44	119	(number with threshold) and 704/233.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/08 15:38
S45	44	(count\$4 same (number with threshold)) and 704/233.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 08:47
S46	66	(count\$4 with frame) and 704/233.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:13
S47	26	(count\$4 near5 (paramater feature sample)) and 704/233.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:17
S48	12	(count\$4 near5 (paramater feature sample)) with threshold and (vad (voice near3 activity near3 detection))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:21
S49	11	(number near5 (paramater feature sample)) with threshold and (vad (voice near3 activity near3 detection))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 09:21
S50	11	704/233.ccls. and vad same (frame with sample)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 10:46
S51	38	704/233.ccls. and vad with frame	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 10:48
S52	100	704/233.ccls. and ((determin\$4 detect\$4) near5 speech near5 frame)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 10:59
S53	0	704/233.ccls. and ((determin\$4 detect\$4) near5 speech near5 each near3 frame)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 10:49
S54	0	((determin\$4 detect\$4) near5 speech near5 each near3 frame)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 10:52

S55	13596	((determin\$4 detect\$4) near5 speech with each near3 frame)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 10:52
S56	0	((determin\$4 detect\$4) near5 speech with each near3 frame)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 10:52
S57	6	704/233.ccls. and frame near5 voicing	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 11:01
S58	15	704/233.ccls. and number near6 ((successive consecutive) near5 (samples features parameters))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 11:56
S59	32	704/233.ccls. and echo and tone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 14:35
S60	14	704/233.ccls. and echo and tone and (overlap\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 14:32
S61	37	VAD and echo and tone and (overlap\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 14:32
S62	14	704/233.ccls. and (tone with speech) and (echo with speech)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 14:38
S63	1	09/828400	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 14:38
S64	94	704/233.ccls. and (compar\$4 with (average mean))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 15:34
S65	4	704/233.ccls. and (compar\$4 with ((spectral spectrum) near3 average))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 15:41
S66	0	704/233.ccls. and (threshold with ((spectral spectrum) near3 average))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 15:42

S67	49	704/233.ccls. and (((spectral spectrum) near3 average))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/09 15:42
S74	175	(fourier fft) and ((upper higher high) near4 (frequenc\$4 envelope)) and (harmonic (frequency near3 multiple)) and (cepstral cepstrum)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/10 09:36
S75	965	((spectral spectrum) near5 power near5 (coefficient parameters))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 12:03
S76	24	((spectral spectrum) near5 power near5 (coefficient parameters)) with threshold	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 12:07
S77	125	((spectral spectrum) near5 power near5 (coefficient parameters)) and threshold and fft	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 12:07
S78	35	((spectral spectrum) near5 power near5 (coefficient parameters)) same fft and threshold	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 12:12
S79	10	((spectral spectrum) near5 power near5 (coefficient parameters)) and fft and threshold and (704/233.ccls. 704/208.ccls. 704/210.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 12:16
S80	15	((spectral spectrum) near5 power) with fft and threshold and (704/233.ccls. 704/208.ccls. 704/210.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 12:20
S81	2	((spectral spectrum) near5 power) with fft and (power with threshold) and (704/233.ccls. 704/208.ccls. 704/210.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 14:05
S82	170	((spectral spectrum) near5 power) with fft and (power with threshold)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 12:23
S83	52	((spectral spectrum) near5 power) with fft and (power with threshold) and (speech voice)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 13:12
S84	34	((spectral spectrum) near5 power) with (fft (fast near3 fourier)) and (power with (limit (water near3 mark))) and (speech voice)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 13:18

S85	57	((spectral spectrum) near5 power) with (fft (fast near3 fourier)) and (power with (threshold)) and (speech voice)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 13:18
S86	2	((spectral spectrum) near5 power) with (fast near3 fourier) and (power with threshold) and (704/233.ccls. 704/208.ccls. 704/210.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/04/22 14:05